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 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2          "Ask CAS" for self-help around the clock
 NEWS  3  FEB 27  New STN AnaVist pricing effective March 1, 2006
 NEWS  4  MAY 10  CA/CAplus enhanced with 1900-1906 U.S. patent records
 NEWS  5  MAY 11  KOREAPAT updates resume
 NEWS  6  MAY 19  Derwent World Patents Index to be reloaded and enhanced
 NEWS  7  MAY 30  IPC 8 Rolled-up Core codes added to CA/CAplus and
                  USPATFULL/USPAT2
 NEWS  8  MAY 30  The F-Term thesaurus is now available in CA/CAplus
 NEWS  9  JUN 02  The first reclassification of IPC codes now complete in
                  INPADOC
 NEWS 10  JUN 26  TULSA/TULSA2 reloaded and enhanced with new search and
                  and display fields
 NEWS 11  JUN 28  Price changes in full-text patent databases EPFULL and PCTFULL
 NEWS 12  JUl 11  CHEMSAFE reloaded and enhanced
 NEWS 13  JUl 14  FSTA enhanced with Japanese patents
 NEWS 14  JUl 19  Coverage of Research Disclosure reinstated in DWPI
 NEWS 15  AUG 09  INSPEC enhanced with 1898-1968 archive
 NEWS 16  AUG 28  ADISCTI Reloaded and Enhanced
 NEWS 17  AUG 30  CA(SM)/CAplus(SM) Austrian patent law changes
 NEWS 18  SEP 11  CA/CAplus enhanced with more pre-1907 records
 NEWS 19  SEP 21  CA/CAplus fields enhanced with simultaneous left and right
                  truncation
 NEWS 20  SEP 25  CA(SM)/CAplus(SM) display of CA Lexicon enhanced
 NEWS 21  SEP 25  CAS REGISTRY(SM) no longer includes Concord 3D coordinates
 NEWS 22  SEP 25  CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
 NEWS 23  SEP 28  CEABA-VTB classification code fields reloaded with new
                  classification scheme

 NEWS EXPRESS  JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
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 NEWS IPC8     For general information regarding STN implementation of IPC 8
 NEWS X25      X.25 communication option no longer available

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* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *
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FILE 'HOME' ENTERED AT 11:01:59 ON 02 OCT 2006

=> file pctfull
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'PCTFULL' ENTERED AT 11:02:11 ON 02 OCT 2006
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FILE LAST UPDATED:          25 SEP 2006      <20060925/UP>
MOST RECENT UPDATE WEEK:        200638       <200638/EW>
FILE COVERS 1978 TO DATE

>>> IMAGES ARE AVAILABLE ONLINE AND FOR EMAIL-PRINTS <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN THIS FILE.
    SEE
    http://www.stn-international.de/stndatabases/details/ipc-reform.html >>>

>>> FOR CHANGES IN PCTFULL PLEASE SEE HELP CHANGE
    (last updated April 10, 2006) <<<

>>> NEW PRICES IN PCTFULL AS OF 01 JULY 2006. FOR DETAILS,
    PLEASE SEE HELP COST <<<

=> s NGR
           457 NGR
             8 NGRS
L1         458 NGR
                 (NGR OR NGRS)

=> s galactose
         15757 GALACTOSE
           184 GALACTOSES
L2       15772 GALACTOSE
                 (GALACTOSE OR GALACTOSES)

=> s l1 and l2
L3          56 L1 AND L2

=> s 1 () 3 () galactos?
       1058914 1
       1041470 3
         38133 GALACTOS?
L4         379 1 (W) 3 (W) GALACTOS?

=> s l4 and l1
L5           8 L4 AND L1

=> s l5 not py>2003
        337448 PY>2003
L6           6 L5 NOT PY>2003

=> d ibib 1-6

L6     ANSWER 1 OF 6     PCTFULL   COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER:        2003063593 PCTFULL  ED 20030818  EW 200332
TITLE (ENGLISH):         METHODS FOR TREATING CANCER BY ADMINISTERING
                         TUMOR-TARGETTED BACTERIA AND AN IMMUNOMODULATORY AGENT
TITLE (FRENCH):          METHODES DE TRAITEMENT DU CANCER PAR ADMINISTRATION
                         D'UNE BACTERIE CIBLEE SUR UNE TUMEUR ET D'UN AGENT
                         IMMUNOMODULATEUR
```

INVENTOR(S): KING, Ivan, C., 65 Blue Hills Road, North Haven, CT 06473, US [US, US];
ZHANG, Li-mou, 406 Hilltop Road, Orange, CT 06477, US [US, US]

PATENT ASSIGNEE(S): VION PHARMACEUTICALS, INC., Four Science Park, New Athens, CT 06511, US [US, US], for all designates States except US;
KING, Ivan, C., 65 Blue Hills Road, North Haven, CT 06473, US [US, US], for US only;
ZHANG, Li-mou, 406 Hilltop Road, Orange, CT 06477, US [US, US], for US only

AGENT: BALDWIN, Geraldine, F.$, Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, NY 10036$, US

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003063593	A1	20030807

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2003-US2451 A 20030128
PRIORITY INFO.: US 2002-60/352,259 20020128

L6 ANSWER 2 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2003003906 PCTFULL ED 20030122 EW 200303
TITLE (ENGLISH): METHODS OF DIAGNOSIS OF BLADDER CANCER, COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF BLADDER CANCER
TITLE (FRENCH): PROCEDE DE DIAGNOSTIC DU CANCER DE LA VESSIE, COMPOSITIONS ET PROCEDES DE CRIBLAGE DE MODULATEURS DU CANCER DE LA VESSIE

INVENTOR(S): MACK, David, H., 2076 Monterey Avenue, Menlo Park, CA 94025, US;
AZIZ, Natasha, 411 California Avenue, Palo Alto, CA 94306, US

PATENT ASSIGNEE(S): EOS BIOTECHNOLOGY, INC., 225A Gateway Boulevard, South San Francisco, CA 94080, US [US, US]

AGENT: PARENT, Annette, S.$, Townsend and Townsend and Crew LLP, Two Embarcadero Center, Eighth Floor, San Francisco, CA 94111$, US

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003003906	A2	20030116

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2002-US21338 A 20020703
PRIORITY INFO.: US 2001-60/302,814 20010703
US 2001-60/310,099 20010803
US 2001-60/343,705 20011108
US 2001-60/350,666 20011113
US 2002-60/372,246 20020412

L6 ANSWER 3 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2001025399 PCTFULL ED 20020820
TITLE (ENGLISH): NON-INVASIVE TUMOR IMAGING BY TUMOR-TARGETED BACTERIA
TITLE (FRENCH): IMAGERIE NON INVASIVE DE TUMEURS PAR DES BACTERIES CIBLEES SUR DES TUMEURS
INVENTOR(S): BERMUDES, David, G.;
KING, Ivan, Cheung-Lam;
BLASBERG, Ronald, G.;
TJUVAJEV, Juri, G.
PATENT ASSIGNEE(S): VION PHARMACEUTICALS, INC.;
SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001025399	A2	20010412

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2000-US27397 A 20001004
PRIORITY INFO.: US 1999-60/157,620 19991004

L6 ANSWER 4 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2001025397 PCTFULL ED 20020820
TITLE (ENGLISH): COMPOSITIONS AND METHODS FOR TUMOR-TARGETED DELIVERY OF EFFECTOR MOLECULES
TITLE (FRENCH): COMPOSITIONS ET METHODES D'ADMINISTRATION CIBLEES SUR LES TUMEURS DE MOLECULES EFFECTRICES
INVENTOR(S): BERMUDES, David, G.;
KING, Ivan, C.;
CLAIRMONT, Caroline, A.;
LIN, Stanley, L.;
BELCOURT, Michael
PATENT ASSIGNEE(S): VION PHARMACEUTICALS, INC.;
BERMUDES, David, G.;
KING, Ivan, C.;
CLAIRMONT, Caroline, A.;
LIN, Stanley, L.;
BELCOURT, Michael
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001025397	A2	20010412

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU

CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-US23242 A 20000824
PRIORITY INFO.: US 1999-60/157,500 19991004
US 1999-60/157,581 19991004
US 1999-60/157,637 19991004

L6 ANSWER 5 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2001024637 PCTFULL ED 20020820
TITLE (ENGLISH): METHODS FOR TREATING SOLID TUMORS WITH IRRADIATION AND BACTERIA
TITLE (FRENCH): METHODES DE TRAITEMENT DE TUMEURS SOLIDES PAR IRRADIATION ET BACTERIES
INVENTOR(S): BERMUDES, David, G.;
LOW, Kenneth, Brooks;
PAWELEK, John, M.
PATENT ASSIGNEE(S): VION PHARMACEUTICALS, INC.;
YALE UNIVERSITY
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001024637	A1	20010412

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL
SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE
DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI
CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-US27391 A 20001004
PRIORITY INFO.: US 1999-60/157,621 19991004

L6 ANSWER 6 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2001014579 PCTFULL ED 20020828
TITLE (ENGLISH): COMPOSITIONS AND METHODS FOR DELIVERY OF AN AGENT USING ATTENUATED SALMONELLA CONTAINING PHAGE
TITLE (FRENCH): COMPOSITIONS ET PROCEDES POUR LA DELIVRANCE D'UN AGENT PAR LE BIAIS D'UNE SALMONELLE ATTENUEE CONTENANT UN PHAGE
INVENTOR(S): BERMUDES, David, G.;
KING, Ivan, C.;
CLAIRMONT, Caroline, A.
PATENT ASSIGNEE(S): VION PHARMACEUTICALS, INC.;
BERMUDES, David, G.;
KING, Ivan, C.;
CLAIRMONT, Caroline, A.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001014579	A2	20010301

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM

TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2000-US23243 A 20000824
PRIORITY INFO.: US 1999-60/150,928 19990826

=> d kwic 6

L6 ANSWER 6 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN

DETD . . . the anti-
angiogenic 19 amino acid peptide fragment of Thrombospondin 1, the anti-angiogenic 20
amino acid peptide fragment of SPARC, RGD and NGR containing peptides, the small anti-
angiogenic peptides of laminin, fibronectin, procollagen and EGF, and peptide antagonists
of integrin 43 and the VEGF. . .
. . .
gene
products can be co-delivered with cytokines, using the same or different promoters and
optionally with an internal ribosome binding site. Similarly, a-1,3-galactosyl transferase
expression on tumor cells allows complement-mediated cell killing.

=> d kwic 4

L6 ANSWER 4 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN

DETD . . . the dpoptosis of
angiogenic blood vessels (Brooks et al., 1994, Cell 79:1157-1164). Peptides comprising
the RGD motif, and another integrin binding motif, NGR (amino acids Asn-Gln-Arg),
showed markedly enhanced anti-tumor activity
The inhibition of the activity of another type of cell surface receptor, namely the
urokinase. . .
. . .
the anti]
angiogenic 22 amino acid peptide fragment of thrombospondin 1, the anti-angiogenic 20
amino acid peptide fragment of SPARC, RGD and NGR containing peptides, the small
anti-angiogenic peptides of laminin, fibronectin, procollagen and EGF, and peptide
antagonists of integrin 03 and the VEGF receptor.

Yet another immunomodulating agent is, a-1,3-galactosyl transferase, whose expression on
tumor cells allows comple ment-mediated cell killing. Further, another immunomodulating
agent is a tumor-associated antigen, i.e. a molecule. . .

CLMEN. . . the anti-angiogenic 22 amino acid peptide fragment of thrombospondin 1, the
anti-angiogenic 20 amino acid peptide fragment of SPARC, RGD and NGR containing
peptides, the small anti-angiogenic peptides of laminin, fibronectin, procollagen and EGF, and

peptide antagonists of integrin avP3, or VEGF receptor.
. . .
anti-angiogenic 22 amino acid peptide fragment of Thrombospondin I,
1 5
the anti-angiogenic 20 amino acid peptide fragment of SPARC, RGD and
NGR containing
peptides, the small anti-angiogenic peptides of laminin, fibronectin,
procollagen and EGF, and
peptide antagonists of integrin 043, or VEGF receptor.
. . .
the anti-angiogenic 22 amino acid peptide fragment of thrombospondin 1,
the
anti-angiogenic 20 amino acid peptide fragment of SPARC, RGD and
NGR containing
peptides, the small anti-angiogenic peptides of laminin, fibronectin,
procollagen and EGF, and
peptide antagonists of integrin avP3, or VEGF receptor.

=> d kwic 1

L6 ANSWER 1 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN

DETD . . . the apoptosis of
angiogenic blood vessels (Brooks et al., 1994, Cell 79:1157-1164).
Peptides comprising the
RGD motif, and another integrin binding motif, NGR (amino
acids Asn-Gln-Arg), showed
markedly enhanced anti-tumor activity
The inhibition of the activity of another type of cell surface receptor,
namely the
urokinase. . .
. . .
receptor antagonists (Soker et aL,
1993] J. Biol. Chem. 272:31582-31588). In a highly preferred embodiment,
the small
peptide comprises an RGD or NGR motif. In certain modes of the
embodiment, the RGD
or NGR containing peptide is presented on the cell surface of
the host bacteria, for
example, by fusing the nucleic acid encoding the. . .
. . .
for both CD28 and CTLA-4, can
1 5 also be delivered to enhance T cell mediated immunity. Yet another
immunomodulating
agent is a-1,3-galactosyl transferase
whose expression on tumor cells allows complement-
mediated cell killing. Moreover, certain antibodies can modulate the
activity of different
aspects of. . .
. . .
13.40, the anti-angiogenic 22 amino acid peptide
fragment of thrombospondin 1, the anti-angiogenic 20 amino acid peptide
fragment of
SPARC, RGD and NGR containing peptides, the small
anti-angiogenic peptides of laminin,
fibronectin, procollagen and EGF, integrina,03 antagonists (e.g.,
anti-integrin aA
antibodies), acid fibroblast growth factor. . .

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 21.04 21.25

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FILE COVERS 1907 - 2 Oct 2006 VOL 145 ISS 15
FILE LAST UPDATED: 1 Oct 2006 (20061001/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s NGR
           420 NGR
            14 NGRS
L7         432 NGR
                (NGR OR NGRS)

=> s 1 () 3 () galactos?
       8843144 1
       6695441 3
        101240 GALACTOS?
L8         729 1 (W) 3 (W) GALACTOS?

=> s l7 (L) l8
L9           2 L7 (L) L8

=> d ibib 1-2

L9   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2004:902137  CAPLUS
DOCUMENT NUMBER:         141:374703
TITLE:                   Use of human serum albumin and NGR peptide
                         conjugates bearing α- 1,3-
                         galactose epitopes in targeting tumor
                         vasculature
INVENTOR(S):             Wagner, Thomas E.; Yu, Xianzhang; Wei, Yanzhang
PATENT ASSIGNEE(S):      Greenville Hospital System, USA
SOURCE:                  PCT Int. Appl., 21 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     WO 2004091551        A2    20041028    WO 2004-US9706         20040331
     WO 2004091551        A3    20050217
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG

CA 2521109	AA	20041028	CA 2004-2521109	20040331
US 2005009740	A1	20050113	US 2004-813432	20040331
EP 1613344	A2	20060111	EP 2004-759057	20040331

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.:	US 2003-458395P	P	20030331
	WO 2004-US9706	W	20040331

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	2004:202868 CAPLUS
DOCUMENT NUMBER:	141:235825
TITLE:	In vitro targeted killing of human endothelial cells by co-incubation of human serum and NGR peptide conjugated human albumin protein bearing α (1-3) galactose epitopes
AUTHOR(S):	Holle, Lori; Song, Wendy; Hicks, Labri; Holle, Eric; Holmes, Lillian; Wei, Yanzhang; Li, Jinhua; Wagner, Thomas; Yu, Xianzhong
CORPORATE SOURCE:	Greenville Hospital System, Oncology Research Institute, Greenville, SC, 29605, USA
SOURCE:	Oncology Reports (2004), 11(3), 613-616 CODEN: OCRPEW; ISSN: 1021-335X
PUBLISHER:	Oncology Reports
DOCUMENT TYPE:	Journal
LANGUAGE:	English
REFERENCE COUNT:	18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file pctfull

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	10.54	31.79

FILE 'PCTFULL' ENTERED AT 11:09:19 ON 02 OCT 2006
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FILE LAST UPDATED:	25 SEP 2006	<20060925/UP>
MOST RECENT UPDATE WEEK:	200638	<200638/EW>

FILE COVERS 1978 TO DATE

>>> IMAGES ARE AVAILABLE ONLINE AND FOR EMAIL-PRINTS <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN THIS FILE.
SEE
http://www.stn-international.de/stndatabases/details/ipc-reform.html >>>

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(last updated April 10, 2006) <<<

>>> NEW PRICES IN PCTFULL AS OF 01 JULY 2006. FOR DETAILS,
PLEASE SEE HELP COST <<<

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=> s wo 01/61017/pn
L10             0 WO 01/61017/PN
                  (WO1/PN)

=> s wo 0161017/pn
L11             0 WO 0161017/PN
                  (WO161017/PN)

=> s wo 01061017/pn
L12             0 WO 01061017/PN
                  (WO1061017/PN)

=> s wo 2001061017/pn
L13             1 WO 2001061017/PN
                  (WO2001061017/PN)

=> s l13 and albumin
          48356 ALBUMIN
           2492 ALBUMINS
          48908 ALBUMIN
                  (ALBUMIN OR ALBUMINS)
L14             1 L13 AND ALBUMIN

=> d kwic

L14     ANSWER 1 OF 1     PCTFULL   COPYRIGHT 2006 Univentio on STN
PI      WO 2001061017        A2 20010823

DETD  .  .  .  0.5 M sodium chloride, 0.2 M glycine-HCI). The
       TNF-antigen containing fractions were neutralized and dialyzed against
       sterile physiological solution. Endotoxin-free human serum
       albumin was
       added before dialysis (0.5 mg/ml) to prevent protein adsorption on
       membranes. The TNF content in each fraction was measured by ELISA.  .  .

       Preliminary experiments showed that the anti-tumor activity was not
       changed by the addition of human serum albumin to TNF and
       NGR-TNF
       solutions, as a carrier. Each experiment was carried out with 5 mice per
       group. The tumor growth was.  .  .
 .  .  .
       competitors
       Competitor Binding of WM 1 5 to tumor
       associated vessels
       None +
       NGR-TNF (25 ]Lg/ml)
       NGR-IFNy (50 gg/ml)
       CNGRC (100 ]Lg/ml)
       TNF (25 gg/ml) +
       Human serum albumin (25 Rg/ml) +
       Synthetic CgA(60-68) (100 gg/ml) +
       ' The competitor, in PBS containing 2% BSA, was added in the blocking
       step and.  .  .


=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       5.52      37.31

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FILE COVERS 1907 - 2 Oct 2006 VOL 145 ISS 15
FILE LAST UPDATED: 1 Oct 2006 (20061001/ED)

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=> s target?
L15     492221 TARGET?

=> d his

     (FILE 'HOME' ENTERED AT 11:01:59 ON 02 OCT 2006)

     FILE 'PCTFULL' ENTERED AT 11:02:11 ON 02 OCT 2006
L1          458 S NGR
L2        15772 S GALACTOSE
L3           56 S L1 AND L2
L4          379 S 1 () 3 () GALACTOS?
L5            8 S L4 AND L1
L6            6 S L5 NOT PY>2003

     FILE 'CAPLUS' ENTERED AT 11:08:29 ON 02 OCT 2006
L7          432 S NGR
L8          729 S 1 () 3 () GALACTOS?
L9            2 S L7 (L) L8

     FILE 'PCTFULL' ENTERED AT 11:09:19 ON 02 OCT 2006
L10           0 S WO 01/61017/PN
L11           0 S WO 0161017/PN
L12           0 S WO 01061017/PN
L13           1 S WO 2001061017/PN
L14           1 S L13 AND ALBUMIN

     FILE 'CAPLUS' ENTERED AT 11:11:15 ON 02 OCT 2006
L15      492221 S TARGET?

=> s l15 and l8
L16         124 L15 AND L8

=> s l15 (L) l8
L17         102 L15 (L) L8

=> s albumin and l17
        126728 ALBUMIN
         84802 ALBUMINS
        148598 ALBUMIN
                  (ALBUMIN OR ALBUMINS)
L18           5 ALBUMIN AND L17

=> d ibib 1-5
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L18 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:902137 CAPLUS
DOCUMENT NUMBER: 141:374703
TITLE: Use of human serum albumin and NGR peptide conjugates bearing α- 1,3- galactose epitopes in targeting tumor vasculature
INVENTOR(S): Wagner, Thomas E.; Yu, Xianzhang; Wei, Yanzhang
PATENT ASSIGNEE(S): Greenville Hospital System, USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004091551	A2	20041028	WO 2004-US9706	20040331
WO 2004091551	A3	20050217		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2521109	AA	20041028	CA 2004-2521109	20040331
US 2005009740	A1	20050113	US 2004-813432	20040331
EP 1613344	A2	20060111	EP 2004-759057	20040331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				

PRIORITY APPLN. INFO.: US 2003-458395P P 20030331
WO 2004-US9706 W 20040331

L18 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:202868 CAPLUS
DOCUMENT NUMBER: 141:235825
TITLE: In vitro targeted killing of human endothelial cells by co-incubation of human serum and NGR peptide conjugated human albumin protein bearing α (1-3) galactose epitopes
AUTHOR(S): Holle, Lori; Song, Wendy; Hicks, Labri; Holle, Eric; Holmes, Lillian; Wei, Yanzhang; Li, Jinhua; Wagner, Thomas; Yu, Xianzhong
CORPORATE SOURCE: Greenville Hospital System, Oncology Research Institute, Greenville, SC, 29605, USA
SOURCE: Oncology Reports (2004), 11(3), 613-616
CODEN: OCRPEW; ISSN: 1021-335X
PUBLISHER: Oncology Reports
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:603778 CAPLUS
DOCUMENT NUMBER: 137:351246

TITLE: Elimination of anti-Gal B cells by α-gal ricin
AUTHOR(S): Tanemura, Masahiro; Ogawa, Haruko; Yin, Deng-Ping; Chen, Zhao-Chun; DiSesa, Verdi J.; Galili, Uri
CORPORATE SOURCE: Department of Cardiovascular-Thoracic Surgery, Rush University, Chicago, IL, 60612, USA
SOURCE: Transplantation (2002), 73(12), 1859-1868
CODEN: TRPLAU; ISSN: 0041-1337
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:227313 CAPLUS
DOCUMENT NUMBER: 137:400
TITLE: Evaluation of Different α-Galactosyl Glycoconjugates for Use in Xenotransplantation
AUTHOR(S): Byrne, Guerard W.; Schwarz, Alexander; Fesi, Joanna R.; Birch, Patrick; Nepomich, Anna; Bakaj, Ivona; Velardo, Margaret A.; Jiang, Cong; Manzi, Adriana; Dintzis, Howard; Diamond, Lisa E.; Logan, John S.
CORPORATE SOURCE: Nextran Inc., Princeton, NJ, USA
SOURCE: Bioconjugate Chemistry (2002), 13(3), 571-581
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:156401 CAPLUS
DOCUMENT NUMBER: 124:225167
TITLE: Macrophage targeting with technetium-99m labeled J001 acylated poly-galactoside for scintigraphy of inflammation: optimization and assessment of imaging specificity in experimental arthritis
AUTHOR(S): Miot-Noirault, E.; Perin, F.; Routledge, L.; Normier, G.; Le Pape, A.
CORPORATE SOURCE: Laboratoire de Biophysique Cellulaire, Faculte de Medecine, Tours, F-37032, Fr.
SOURCE: European Journal of Nuclear Medicine (1996), 23(1), 61-8
CODEN: EJNMD9; ISSN: 0340-6997
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

=> d ibib abs kwic 1-5

L18 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:902137 CAPLUS
DOCUMENT NUMBER: 141:374703
TITLE: Use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature
INVENTOR(S): Wagner, Thomas E.; Yu, Xianzhang; Wei, Yanzhang
PATENT ASSIGNEE(S): Greenville Hospital System, USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004091551	A2	20041028	WO 2004-US9706	20040331
WO 2004091551	A3	20050217		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2521109	AA	20041028	CA 2004-2521109	20040331
US 2005009740	A1	20050113	US 2004-813432	20040331
EP 1613344	A2	20060111	EP 2004-759057	20040331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				

PRIORITY APPLN. INFO.: US 2003-458395P P 20030331
WO 2004-US9706 W 20040331

AB Use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature. The NGR/galactose-α1,3-Gal-HSA peptide was designed to specifically target CD13 pos. cells and induce cell lysis. NGR is the targeting component of the peptide in that it binds the CD13 isoform (aminopeptidase) that is expressed in tumor vessels. Galactose .alpha.1,3-galactose terminal carbohydrate epitope (α1,3Gal) induces a strong antibody reaction in human and Old World Monkeys and in vivo, this reaction leads to organ rejection. The human serum albumin (HSA) bearing α1,3Gal epitope was therefore used to lyse cells. NGR/α1,3Gal-HSA binds CD13 pos. human umbilical vein endothelial cells (HUVEC). NGR/α1,3Gal-HSA induces lysis of HUVECs upon incubation with human serum. Therefore, by conjugating NGR to HSA bearing α1,3Gal epitopes, cells expressing CD13 could be lysed.

TI Use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature

AB Use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature. The NGR/galactose-α1,3-Gal-HSA peptide was designed to specifically target CD13 pos. cells and induce cell lysis. NGR is the targeting component of the peptide in that it binds the CD13 isoform (aminopeptidase) that is expressed in tumor vessels. Galactose .alpha.1,3-galactose terminal carbohydrate epitope (α1,3Gal) induces a strong antibody reaction in human and Old World Monkeys and in vivo, this reaction leads to organ rejection. The human serum albumin (HSA) bearing α1,3Gal epitope was therefore used to lyse cells. NGR/α1,3Gal-HSA binds CD13 pos. human umbilical vein endothelial cells (HUVEC). NGR/α1,3Gal-HSA induces lysis of HUVECs upon incubation with human serum. Therefore, by conjugating NGR to HSA bearing α1,3Gal epitopes, cells expressing CD13 could be lysed.

ST NGR peptide human serum albumin galactose epitope conjugate angiogenesis

IT Complement
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-mediated hyperactive immune response; use of human serum

albumin and NGR peptide conjugates bearing α- 1, 3-galactose epitopes in targeting tumor vasculature)

IT Peptides, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NGR; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Intestine, neoplasm
(colorectal; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Neoplasm
Neoplasm
(head and neck; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Drug delivery systems
(injections, i.v.; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Antibodies and Immunoglobulins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal, .alpha.1,3-galactose; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Albumins, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(serum; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Vein
(umbilical, endothelium; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Immunity
Neoplasm
(use of human serum albumin and NGR peptide conjugates bearing -1,3-galactose epitopes in targeting tumor vasculature)

IT Angiogenesis inhibitors
Animal cell
Animal tissue
Antitumor agents
Bladder, neoplasm
Brain, neoplasm
Cytolysis
Drug delivery systems
Head and Neck, neoplasm
Head and Neck, neoplasm
Human
Kidney, neoplasm
Lung, neoplasm
Mammary gland, neoplasm
Ovary, neoplasm
Pancreas, neoplasm
Prostate gland, neoplasm
(use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Ligands

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

IT Antibodies and Immunoglobulins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.1,3-galactose; use of human serum albumin and NGR peptide conjugates bearing α- 1, 3-galactose epitopes in targeting tumor vasculature)

IT 59-23-4, Galactose, biological studies 13168-24-6, Galactose α-1,3-galactose
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(galactose .alpha.1,3-galactose antibody; use of human serum albumin and NGR peptide conjugates bearing α- 1,3-galactose epitopes in targeting tumor vasculature)

L18 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:202868 CAPLUS
DOCUMENT NUMBER: 141:235825
TITLE: In vitro targeted killing of human endothelial cells by co-incubation of human serum and NGR peptide conjugated human albumin protein bearing α (1-3) galactose epitopes
AUTHOR(S): Holle, Lori; Song, Wendy; Hicks, Labri; Holle, Eric; Holmes, Lillian; Wei, Yanzhang; Li, Jinhua; Wagner, Thomas; Yu, Xianzhong
CORPORATE SOURCE: Greenville Hospital System, Oncology Research Institute, Greenville, SC, 29605, USA
SOURCE: Oncology Reports (2004), 11(3), 613-616
CODEN: OCRPEW; ISSN: 1021-335X
PUBLISHER: Oncology Reports
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The NGR/α1,3Gal-HSA peptide was designed to specifically target CD13 pos. cells and induce cell lysis. NGR is the targeting component of the peptide in that it binds the CD13 isoform (aminopeptidase) that is expressed in tumor vessels. Galactose .alpha.1,3-galactose terminal carbohydrate epitope (α1,3Gal) induces a strong antibody reaction in human and Old World Monkeys and in vivo, this reaction leads to organ rejection. The human serum albumin (HSA) bearing α1,3Gal epitope was therefore used to lyse cells. In the present study, we were able to demonstrate that NGR/α1,3Gal-HSA binds CD13 pos. human umbilical vein endothelial cells (HUVEC). We also found by live/dead fluorescent staining that NGR/α1,3Gal-HSA was able to induce lysis of HUVECs upon incubation with human serum. Therefore, by conjugating NGR to HSA bearing α1,3Gal epitopes, we are able to specifically target and lyse cells expressing CD13. This strategy may be potentially useful in tumor anti-angiogenesis therapy.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI In vitro targeted killing of human endothelial cells by co-incubation of human serum and NGR peptide conjugated human albumin protein bearing α (1-3) galactose epitopes

AB The NGR/α1,3Gal-HSA peptide was designed to specifically target CD13 pos. cells and induce cell lysis. NGR is the targeting component of the peptide in that it binds the CD13 isoform (aminopeptidase) that is expressed in tumor vessels. Galactose .alpha.1,3-galactose terminal carbohydrate

epitope (α1,3Gal) induces a strong antibody reaction in human and Old World Monkeys and in vivo, this reaction leads to organ rejection. The human serum albumin (HSA) bearing α1,3Gal epitope was therefore used to lyse cells. In the present study, we were able to demonstrate that NGR/α1,3Gal-HSA binds CD13 pos. human umbilical vein endothelial cells (HUVEC). We also found by live/dead fluorescent staining that NGR/α1,3Gal-HSA was able to induce lysis of HUVECs upon incubation with human serum. Therefore, by conjugating NGR to HSA bearing α1,3Gal epitopes, we are able to specifically target and lyse cells expressing CD13. This strategy may be potentially useful in tumor anti-angiogenesis therapy.

ST NGR peptide human serum albumin galactose epitope conjugate angiogenesis

IT Angiogenesis inhibitors
Cytolysis
Drug delivery systems
Human
(CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro indicating NGR/α1,3Gal-HSA possible use in tumor anti-angiogenesis therapy)

IT Protein motifs
(NGR; CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro indicating NGR/α1,3Gal-HSA possible use in tumor anti-angiogenesis therapy)

IT Albumins, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(serum; CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro indicating NGR/α1,3Gal-HSA possible use in tumor anti-angiogenesis therapy)

IT Endothelium
(umbilical venous; CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro indicating NGR/α1,3Gal-HSA possible use in tumor anti-angiogenesis therapy)

IT Vein
(umbilical, endothelium; CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro indicating NGR/α1,3Gal-HSA possible use in tumor anti-angiogenesis therapy)

IT Antibodies and Immunoglobulins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α1,3-galactose; CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro indicating NGR/α1,3Gal-HSA possible use in tumor anti-angiogenesis therapy)

IT 9054-63-1, CD13
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro indicating NGR/α1,3Gal-HSA possible use in tumor anti-angiogenesis therapy)

IT 59-23-4, Galactose, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(galactose α1,3-galactose antibody; CD13 pos. HUVEC cells were lysed with coincubation of human serum albumin and NGR peptide bearing galactose α1,3-galactose epitope in vitro)

L18 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:603778 CAPLUS
DOCUMENT NUMBER: 137:351246

TITLE: Elimination of anti-Gal B cells by α-gal ricin
AUTHOR(S): Tanemura, Masahiro; Ogawa, Haruko; Yin, Deng-Ping; Chen, Zhao-Chun; DiSesa, Verdi J.; Galili, Uri
CORPORATE SOURCE: Department of Cardiovascular-Thoracic Surgery, Rush University, Chicago, IL, 60612, USA
SOURCE: Transplantation (2002), 73(12), 1859-1868
CODEN: TRPLAU; ISSN: 0041-1337
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background. A major barrier in pig to human organ transplantation is the binding of human anti-Gal to α-gal epitopes (Galα1-3Galβ1-4GlcNAc-R) on pig cells, resulting in hyperacute and acute vascular rejection of pig xenografts. Moreover, the immune system in xenograft recipients is activated by these epitopes to produce high affinity anti-Gal, which is also detrimental to xenografts. Production of anti-Gal can be prevented by specific elimination of anti-Gal B cells. This was achieved with the toxin ricin A, coupled to human α1-acid glycoprotein modified to carry α-gal epitopes. This complex, designated α-gal ricin, is targeted in vivo to anti-Gal B cells by interaction with the Ig mols. (i.e., B cell receptors) on these cells. Methods. Carbohydrate chains on α1-acid glycoprotein were converted to carry α-gal epitopes by enzymic treatment with recombinant .alpha.1,3 galactosyltransferase (α1,3GT). This mol. and ricin A were biotinylated and coupled by avidin to generate α-gal ricin. The efficacy of α-gal ricin in eliminating anti-Gal B cells was studied in the exptl. model of α1,3GT knockout (KO) mice. These mice produce large amts. of anti-Gal IgG when immunized with pig kidney membranes, as measured by ELISA with α-gal epitopes linked to bovine serum albumin (BSA). In the absence of anti-Gal B cells, these mice lack the ability to produce anti-Gal. Results. Repeated administration of α-gal ricin into α1,3GT KO mice resulted in elimination of anti-Gal B cells, thereby preventing production of anti-Gal IgG after immunization with pig kidney membranes. This prevention of anti-Gal production occurred with doses of α-gal ricin that were not toxic to the mice and did not affect production of antibodies with other specificities. Conclusions. Administration of α-gal ricin results in specific elimination of anti-Gal B cells in α1,3GT KO mice. The elimination of these B cells may prove to be helpful in attempts to achieve immune tolerance to α-gal epitopes in primates.
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB Background. A major barrier in pig to human organ transplantation is the binding of human anti-Gal to α-gal epitopes (Galα1-3Galβ1-4GlcNAc-R) on pig cells, resulting in hyperacute and acute vascular rejection of pig xenografts. Moreover, the immune system in xenograft recipients is activated by these epitopes to produce high affinity anti-Gal, which is also detrimental to xenografts. Production of anti-Gal can be prevented by specific elimination of anti-Gal B cells. This was achieved with the toxin ricin A, coupled to human α1-acid glycoprotein modified to carry α-gal epitopes. This complex, designated α-gal ricin, is targeted in vivo to anti-Gal B cells by interaction with the Ig mols. (i.e., B cell receptors) on these cells. Methods. Carbohydrate chains on α1-acid glycoprotein were converted to carry α-gal epitopes by enzymic treatment with recombinant .alpha.1,3 galactosyltransferase (α1,3GT). This mol. and ricin A were biotinylated and coupled by avidin to generate α-gal ricin. The efficacy of α-gal ricin in eliminating anti-Gal B cells was studied in the exptl. model of α1,3GT knockout (KO) mice. These mice produce large amts. of anti-Gal IgG when immunized with pig kidney membranes, as measured by ELISA with α-gal epitopes linked to bovine serum albumin (BSA). In the absence of anti-Gal B cells, these mice lack the ability to

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L18 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:227313 CAPLUS
DOCUMENT NUMBER: 137:400
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AUTHOR(S): Byrne, Guerard W.; Schwarz, Alexander; Fesi, Joanna R.; Birch, Patrick; Nepomich, Anna; Bakaj, Ivona; Velardo, Margaret A.; Jiang, Cong; Manzi, Adriana; Dintzis, Howard; Diamond, Lisa E.; Logan, John S.
CORPORATE SOURCE: Nextran Inc., Princeton, NJ, USA
SOURCE: Bioconjugate Chemistry (2002), 13(3), 571-581
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Porcine organs are rapidly rejected after transplantation into primate recipients due to the presence of preexisting Igs that bind to terminal galactose .alpha.1,3 galactose residues (α-galactosyl) present on porcine glycoproteins and glycolipids. Currently available immunosuppressive reagents have been largely ineffective at controlling the synthesis of these anti-Gal antibodies. Nonantigenic hapten polymers have been shown to be effective materials for blocking humoral immune responses in various model systems. We have developed a series of α-galactosyl glycoconjugate polymers and tested their ability to block anti-Gal antibody binding in vitro and in vivo. A galactose .alpha.1,3 galactose β 1,4 GlcNAc trisaccharide free acid (TRFA) with a hexanoic acid spacer, containing five methylene groups and a carboxylic acid, was produced and coupled to a variety of polymeric backbones including dextran, branched poly(ethylene glycol) (PEG), and poly-L-lysine. The ability of monomeric TRFA and the α-galactosyl conjugates to block anti-Gal IgG and IgM binding was determined using a competition ELISA assay on defined HSA-Gal glycoconjugates and porcine microvascular endothelial cell substrates. We show that branched PEG carriers, with a TRFA sugar attached to each branch, exhibit enhanced antibody blocking ability compared to TRFA, but at higher target antigen densities these simple PEG conjugates are no more effective then an equivalent amount of TRFA in blocking anti-Gal IgM antibody interactions. In contrast, polymers of the branched PEG conjugates and linear conjugates made using dextran and poly-L-lysine were 2000 to 70000-fold more effective inhibitors of anti-Gal antibodies. In a study using nonhuman primates, a single dose infusion of polymeric PEG or dextran glycoconjugates dramatically reduced the level of circulating anti-Gal antibodies in cynomolgus monkeys for at least 72 h. Glycoconjugates similar to these might be useful both to block anti-Gal interactions in vivo and to specifically control the induced anti-Gal immune response.
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB Porcine organs are rapidly rejected after transplantation into primate recipients due to the presence of preexisting Igs that bind to terminal galactose .alpha.1,3 galactose residues (α-galactosyl) present on porcine glycoproteins and glycolipids.

Currently available immunosuppressive reagents have been largely ineffective at controlling the synthesis of these anti-Gal antibodies. Nonantigenic hapten polymers have been shown to be effective materials for blocking humoral immune responses in various model systems. We have developed a series of α-galactosyl glycoconjugate polymers and tested their ability to block anti-Gal antibody binding in vitro and in vivo. A galactose .alpha.1,3 galactose β 1,4 GlcNAc trisaccharide free acid (TRFA) with a hexanoic acid spacer, containing five methylene groups and a carboxylic acid, was produced and coupled to a variety of polymeric backbones including dextran, branched poly(ethylene glycol) (PEG), and poly-L-lysine. The ability of monomeric TRFA and the α-galactosyl conjugates to block anti-Gal IgG and IgM binding was determined using a competition ELISA assay on defined HSA-Gal glycoconjugates and porcine microvascular endothelial cell substrates. We show that branched PEG carriers, with a TRFA sugar attached to each branch, exhibit enhanced antibody blocking ability compared to TRFA, but at higher target antigen densities these simple PEG conjugates are no more effective then an equivalent amount of TRFA in blocking anti-Gal IgM antibody interactions. In contrast, polymers of the branched PEG conjugates and linear conjugates made using dextran and poly-L-lysine were 2000 to 70000-fold more effective inhibitors of anti-Gal antibodies. In a study using nonhuman primates, a single dose infusion of polymeric PEG or dextran glycoconjugates dramatically reduced the level of circulating anti-Gal antibodies in cynomolgus monkeys for at least 72 h. Glycoconjugates similar to these might be useful both to block anti-Gal interactions in vivo and to specifically control the induced anti-Gal immune response.

IT Albumins, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(serum, human, glycoconjugates; evaluation of different α-galactosyl glycoconjugates for use in xenotransplantation)

L18 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:156401 CAPLUS
DOCUMENT NUMBER: 124:225167
TITLE: Macrophage targeting with technetium-99m labeled J001 acylated poly-galactoside for scintigraphy of inflammation: optimization and assessment of imaging specificity in experimental arthritis
AUTHOR(S): Miot-Noirault, E.; Perin, F.; Routledge, L.; Normier, G.; Le Pape, A.
CORPORATE SOURCE: Laboratoire de Biophysique Cellulaire, Faculte de Medecine, Tours, F-37032, Fr.
SOURCE: European Journal of Nuclear Medicine (1996), 23(1), 61-8
CODEN: EJNMD9; ISSN: 0340-6997
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

AB J001, an acylated poly-(1,3)-galactoside purified from the membrane of Klebsiella pneumoniae, assocs. selectively with macrophages via the binding to CD11b and CD14 mols. Inflammatory foci known to recruit macrophages could thus be imaged with technetium-99m labeled J001. This study aims to define the optimal scintigraphic protocol for 99mTc-J001 imaging and to evaluate the specificity of J001 scans. A dose range study was conducted in rabbits with immunol. arthritis using six different specific activities ranging from 370 to 11840 MBq·mg-1 while the i.v. injected activity was constant (37 MBq). Radiochem. purity for each preparation was documented together with the in vivo stability of the 99mTc-J001 complex using exclusion-diffusion radio-HPLC of serum collected 1 h after radiopharmaceutical administration. Scintigraphic images were recorded at 2, 3 and 4 h and

analyzed using indexes calculated from regions of interest. Specificity of the macrophage imaging was assessed by comparison with scans obtained after administration of 99mTcO4- or 99mTc-albumin nanocolloids. A protocol of plasma transfusion was also used to inject 99mTc-J001 after complete removal of radioactive colloids likely to be generated during the labeling. For the higher specific activities (5920 and 11840 MBq·mg-1), radiochem. purity degradation and in vitro 99mTc transchelation were noted. To prevent transchelation and 99mTc bond hydrolysis likely to impair imaging specificity, 1480 MBq·mg-1 corresponding to 25 μg injected J001 was found to be the optimal usable specific activity. Results obtained with the various tracers support the hypothesis that macrophage targeting is the main factor involved in the J001 imaging of arthritis.

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=> d his

(FILE 'HOME' ENTERED AT 11:01:59 ON 02 OCT 2006)

FILE 'PCTFULL' ENTERED AT 11:02:11 ON 02 OCT 2006
L1 458 S NGR
L2 15772 S GALACTOSE
L3 56 S L1 AND L2
L4 379 S 1 () 3 () GALACTOS?
L5 8 S L4 AND L1
L6 6 S L5 NOT PY>2003

FILE 'CAPLUS' ENTERED AT 11:08:29 ON 02 OCT 2006
L7 432 S NGR
L8 729 S 1 () 3 () GALACTOS?
L9 2 S L7 (L) L8

FILE 'PCTFULL' ENTERED AT 11:09:19 ON 02 OCT 2006
L10 0 S WO 01/61017/PN
L11 0 S WO 0161017/PN
L12 0 S WO 01061017/PN
L13 1 S WO 2001061017/PN
L14 1 S L13 AND ALBUMIN

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     FILE 'CAPLUS' ENTERED AT 11:11:15 ON 02 OCT 2006
L15       492221 S TARGET?
L16          124 S L15 AND L8
L17          102 S L15 (L) L8
L18            5 S ALBUMIN AND L17

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=> s 1 () 3 () galactos?
         373994 1
         297830 3
           3250 GALACTOS?
L19          32 1 (W) 3 (W) GALACTOS?

=> s NGR and l19
             17 NGR
L20           0 NGR AND L19

=> s RGD and l19
            275 RGD
             45 RGDS
            307 RGD
                  (RGD OR RGDS)
L21           0 RGD AND L19

=> s albumin and l19
           3183 ALBUMIN
            101 ALBUMINS
           3236 ALBUMIN
                  (ALBUMIN OR ALBUMINS)
L22           0 ALBUMIN AND L19

=>

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